ABB – a technology leader in electrification and automation

ABR

- **1.** Market leader with world class technology
- 2. ABB Way accountability, transparency and speed
- **3.** Increasing growth rates
- 4. Improving performance
- **5.** Rewarding shareholders

We enable a more sustainable ar resource-efficient future with our technology leadership in electrification and automation



 $\stackrel{\uparrow}{\stackrel{\circ}{\bigcirc}} \stackrel{\bullet}{\stackrel{\circ}{\rightarrow}} No. 1 - 2 market$ position



Cutting edge technology



Value through software





#### Business in **100+** countries

- Factory footprint in **>40** countries
- Service presence in **100+** countries
- **6,000+** channel partners globally



Motion

Global No. 1

Electrification Global No. 2

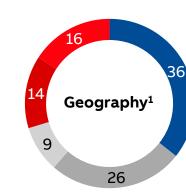


Process Automation Global No. 2





Market leadership resulting in strong economies of scale and pricing power





Global No. 1-2 in Electrification & Automation

	-```	
No. 1 -2 market	• Cutting edge technology	Value through software

#### Deliver more value with

less input through a sustainable use of resources by utilization of technology

Remain a **relevant** and **trusted partner** for our customers

## Annual R&D investments of 4–5% of revenues



Total R&D spend 2016 - 2023

excluding PG

>\$9.1 bn



#### Flexley Tug

Autonomous mobile robot with minimum dimensions, large capacity and great maneuverability for intralogistics towing applications.



#### NeoGear™ LV switchgear

Safest switchgear ever made. 25% footprint reduction, dissipates 20% less heat, 30% operational cost reduction



#### ABB Ability™ Genix

Applies the combined power of industrial analytics and artificial intelligence of assets and plants – improving their safety, productivity and sustainability



#### EC Titanium integrated motor & drive package

World's most energy efficient integrated motor & drive package



#### ACH580 ultra-low harmonics drives

Ultra-low harmonic drives minimizing disturbances for the grid, optimizing energy efficiency and saving space in buildings



#### **SACE Infinitus**

First certified solid-state circuit breaker to enable the next generation of safe, energyefficient DC power systems



#### Dynafin™ propulsion

Dynafin™ is a new concept representing a revolutionary propulsion system for mediumsized and smaller vessels breaking new ground for efficiency in the marine industry, inspired by the dynamic motions of a whale's tail

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No. 1 -2 market	Cutting edge	Value through
position	technology	software

#### With a history of more than **140 years** ABB is a technology pioneer

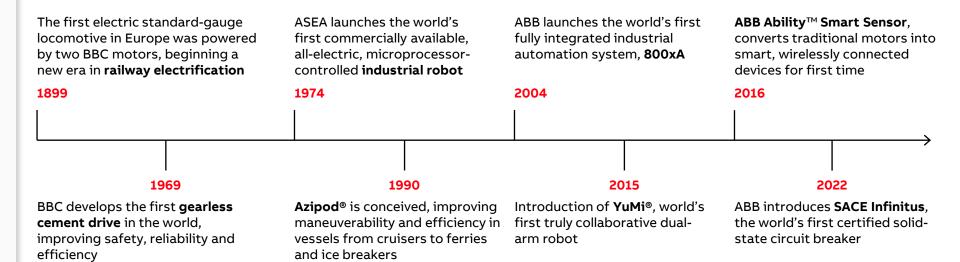
Innovation driven by deep application **know-how** due to decades-long presence in our chosen end-markets

#### Large installed base

1. % of FY23 revenues, management estimates. T&I: Transport & Infrastructure

## Deep understanding of customer needs

Select highlights of our history of innovation



#### Innovations fit for a broad industrial sales exposure<sup>1</sup>





#### Software embedded in products to create customer value

~55%<sup>1</sup> of R&D employees focused on digital

## Value from software

- 1. Increase the digital content in our products to support gross margin and industry leadership in technology
- 2. Embedded software enables differentiation
- 3. Continue to develop Industrial Software and Digital services organically and make bolt-on acquisitions:
  - Invest to create synergies ٠ with our offering
  - Return on investment ٠
  - Growth •

nergies



**Robotics & Discrete** Automation and Process Automation business areas use Al, digital connectivity and software to make robots smarter, accelerate automation and push the frontiers of technology. Motion is launching adaptive vibration control enabling high process performance, equipment maintenance and lifetime monitoring.

## Value from software, including AI

Driving internal efficiencies



Natural

language

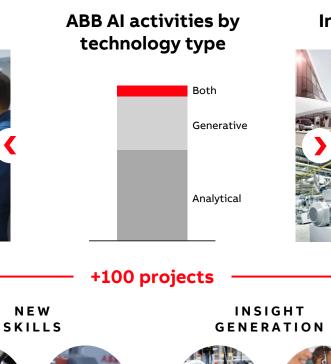
instruction

HUMAN-MACHINE

INTERACTION

Learning from

observation



Predictive

maintenance

Customer

chatbot

AMRs

ltem picking

#### Innovating for our customers



 $\checkmark$ 

OPTIMIZATION





Genix

ABB



## ABB Way – accountability, transparency and speed

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Leveraging on decentralized operating model

Select common processes in ABB Way



Strong performance management system



#### Accountability, transparency and speed

Leveraging on decentralized operating model Select common processes in ABB Way Strong performance management system

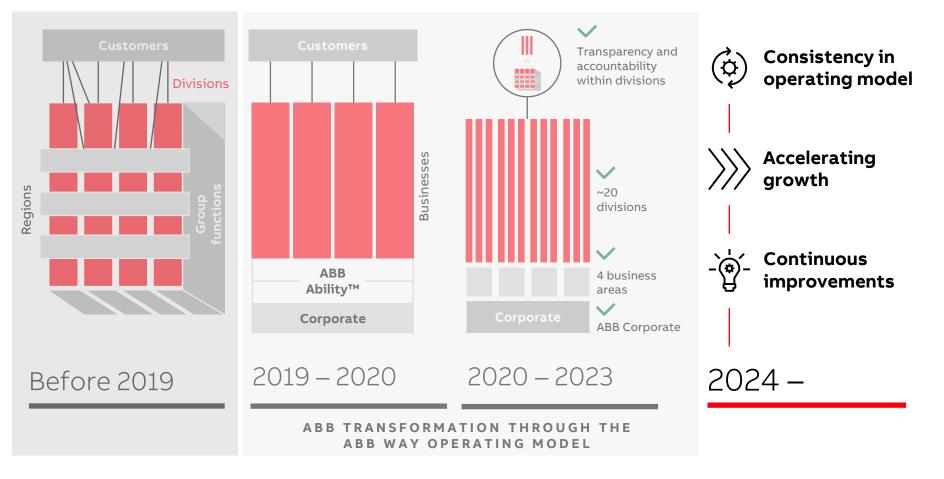
#### Increasing growth by

leveraging on faster decision-making closer to the customers within divisions

#### Continuous

**improvements** is a core part of the firmly cemented ABB Way operating model

## **Cemented decentralized operating model** Increasing focus on growth as coming out of the transformation phase



#### We have aligned the business portfolio to the ABB Purpose

We enable a more sustainable and resource-efficient future with our technology leadership in electrification and automation





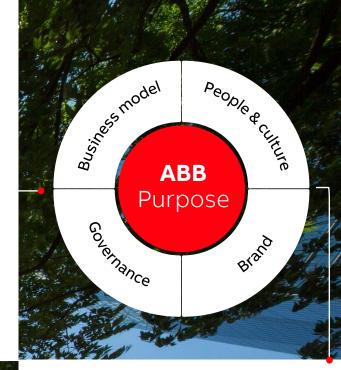
#### Exited ~\$1.8bn of revenues in three high performing divisions

- Mechanical Power Transmission, MO divestment
- Turbocharging (Accelleron), PA spin-off
- Power Conversion, EL divestment

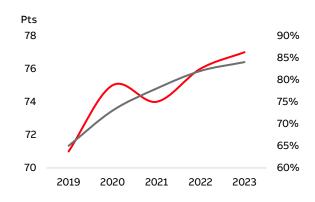
## Going forward, continuous pruning within divisions

#### Implemented the ABB Way operating model

- Operating decisions in the divisions, close to customers Increased accountability, transparency and speed
- Performance culture
- Clarity on strategic mandate and target setting



#### Strong improvement in Employee Engagement Survey



Employee Engagement Score (Left axis) Employee Response Rate (Right axis)



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൷ Leveraging on Select common Strong decentralized processes in performance operating ABB Way management model system

Each business expected to hold or achieve a No. 1-2 market position in their chosen segment

Continuous portfolio reviews

## ~20 divisions with full operational accountability





Each business should benefit from being part of the ABB Group

Internal mantra of "good leaders cooperate". Business leaders are expected to find synergies

driving competitive advantages

Remuneration system supports cooperation

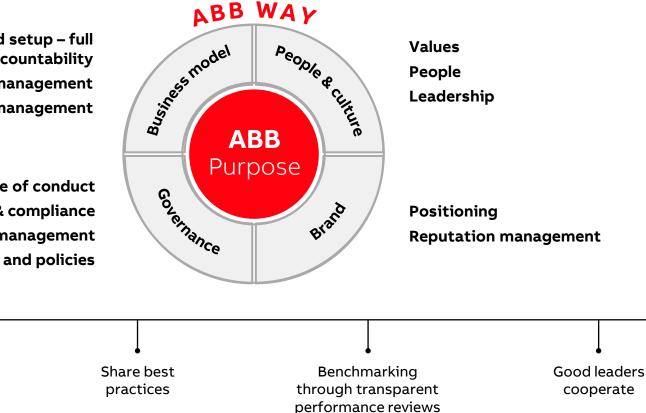
## The ABB Way – the "glue" that unites our Group

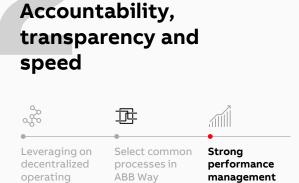
Decentralized setup – full division accountability Performance management Portfolio management

Code of conduct Internal control & compliance Risk management Regulations, processes and policies

Performance

culture





system

#### Increased transparency

model

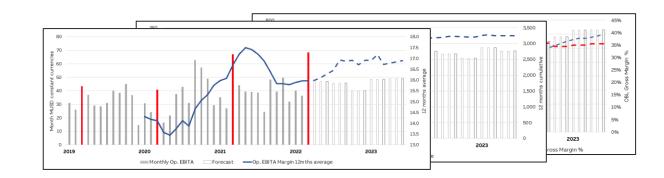
Common scorecard system for all divisions and business areas

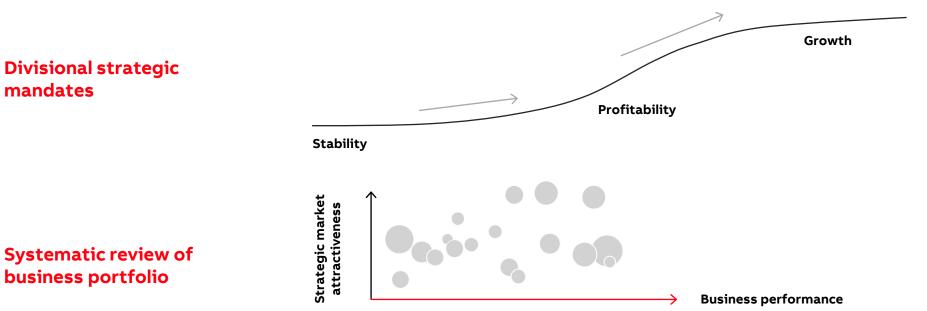
**Clarity** on performance accountability

## Transparency through performance management system

Monthly standardized scorecard system by division

mandates







Reshaped portfolio

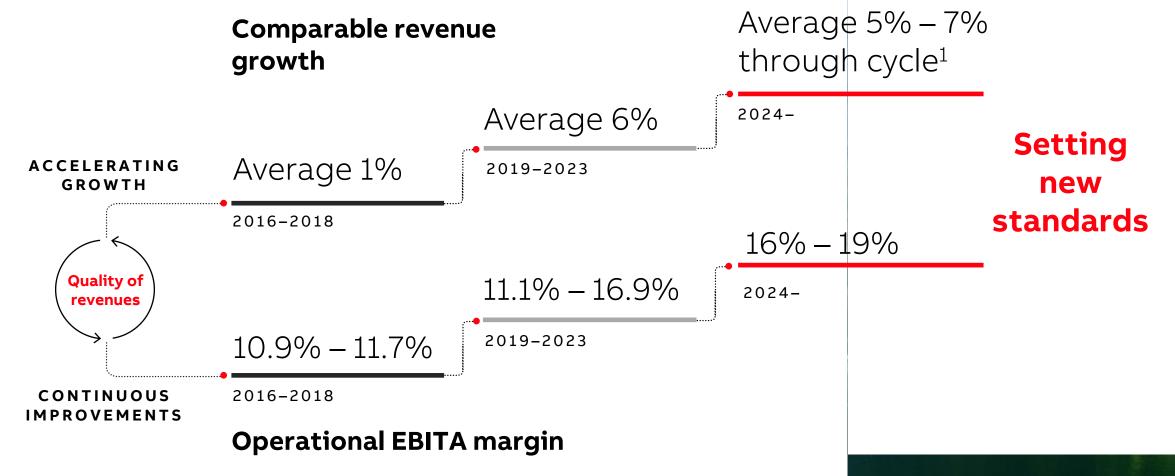


Working in ABB Way operating model



Accelerating sustainability drivers **Increasing ambitions and continuous improvements** for growth and margin





As reported, i.e., business portfolio is not comparable over the historical periods 1. Excluding FX impacts, acquisitions and divestments

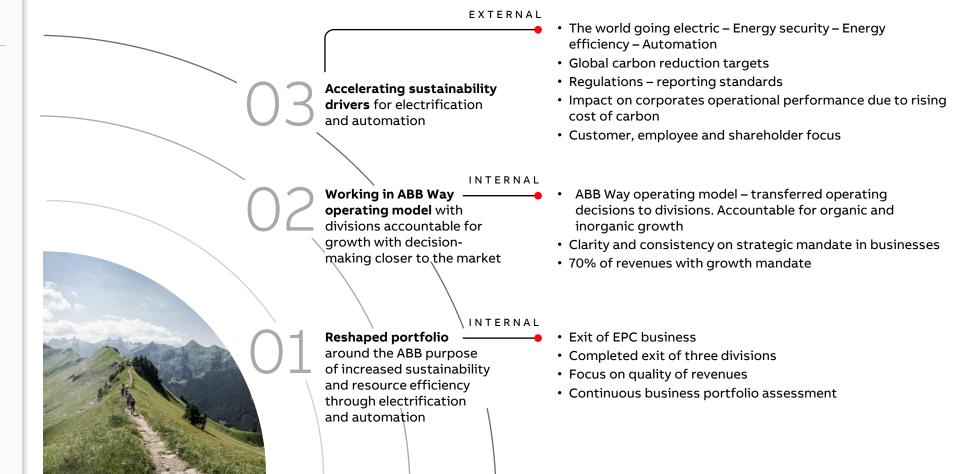


#### Global No. 1–2 positions in segments with secular growth trends; electrification and automation

Organic growth investments driven by divisional needs

Divisions accountable for growth – both organic and acquired

## Increasing revenue growth supported by three drivers





# Significant actions to **align business portfolio** to more attractive

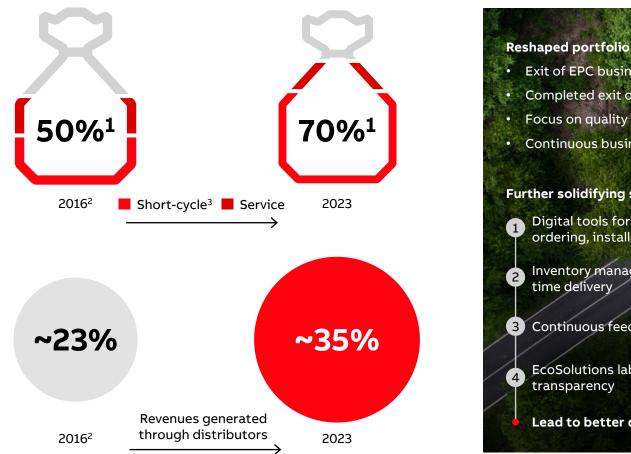
growth markets

ABB businesses aligned with our **purpose of electrification and automation** 

**Reduced exposure** to project business

1. Management estimates 2. Includes Power Grids which is now excluded from continuing operations 3. Orders (excl. service) converting to revenues within three to six months

## **Improving quality of revenues** Higher profitability and lower earnings risk



# Exit of EPC business Completed exit of three divisions Focus on quality of revenues Continuous business portfolio assessment Further solidifying strong channel partners Digital tools for right product selection, ordering, installation and service Inventory management and on time delivery Continuous feedback loop EcoSolutions labelling for sustainability transparency

Lead to better quality short cycle business

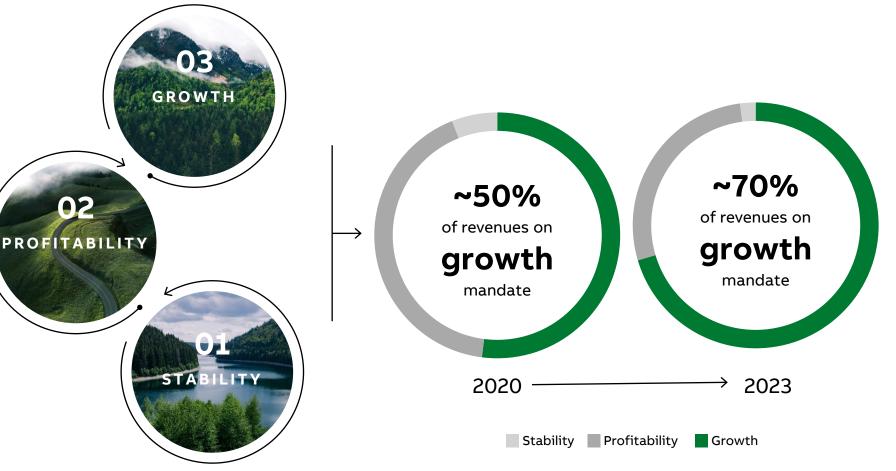
# Reshaped Working in ABB Way operating model drivers

Global No. 1–2 positions in sustainable growth segments; electrification and automation

**Organic growth investments** driven by divisional needs

Divisions accountable for growth – both organic and acquired

# Transition of strategic mandates towards growth through the ABB Way operating model

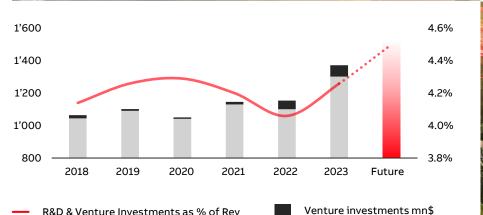




Each division responsible for its R&D to **hold or achieve a no. 1-2 market position** 

## **Continued focus on Research & Development** Moving towards 5% of revenues

Investing proportionately more in R&D year-on-year than SG&A expense

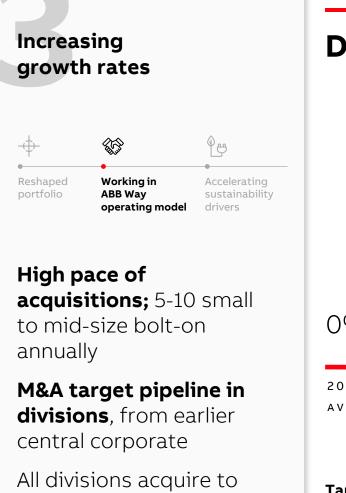


Non-order related R&D mn \$1

#### Different investment needs across divisions...



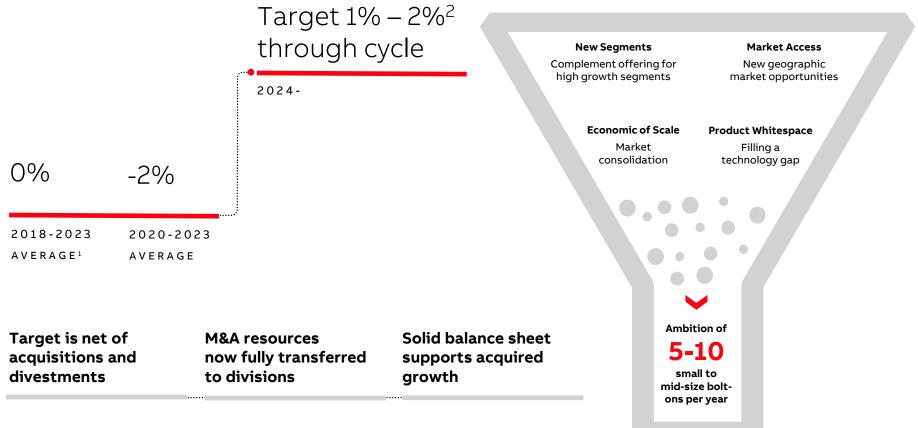




fill gaps in technology,

but only divisions with growth mandate consolidate the market





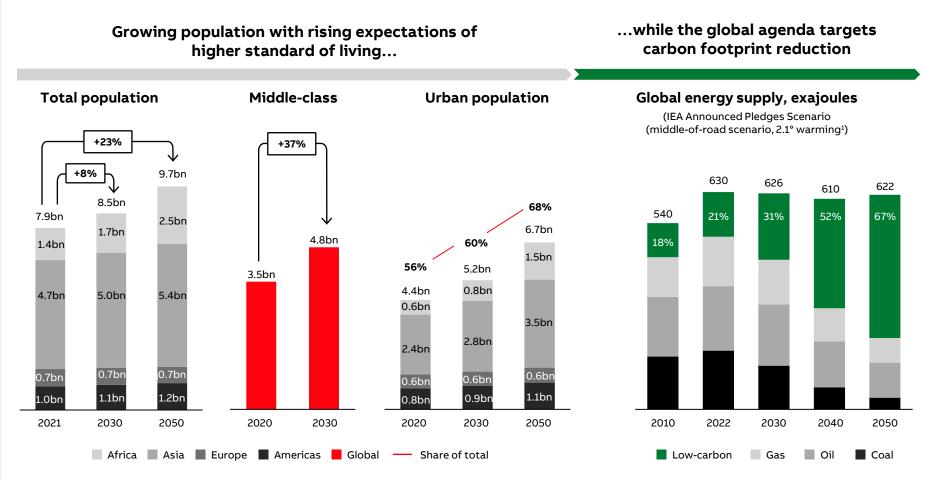


Future proof market position, exposed to strong secular trends

As a technology leader in electrification and automation, ABB is at the **core of accelerating the energy transition** 

Every day, we empower customers across the globe to **optimize**, **electrify and decarbonize** their operations

## Well positioned in a changing world



1. By 2100, 50% confidence interval Source: UN, Brookings; IEA World Energy Outlook, 2023, Announced Pledges Scenario



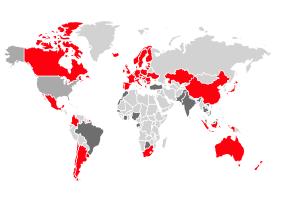
#### Strong anticipated growth in investments for low carbon energy supply and energy efficiency

Adoption of carbon pricing as a tool to drive green investments

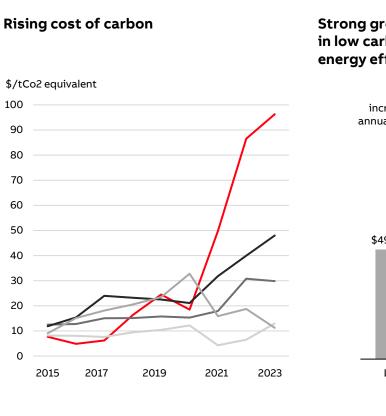
Carbon pricing to become a key tool for regulators to **accelerate investments** in low carbon and energy efficient solutions

## **Rising cost of carbon** puts spotlight on low carbon solutions

Carbon pricing is spreading globally and already covering several large economies



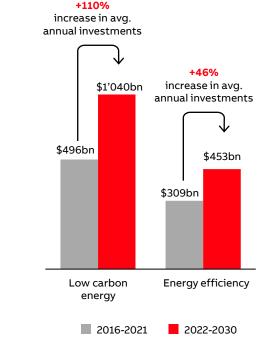
Carbon market/tax implemented
 Carbon market/tax on sub-national level
 Carbon market/tax considered



Beijing

- Canada - California - Korea

Strong growth in annual investments in low carbon energy supply and energy efficiency



Source: Bloomberg New Energy Finance: IEA World Energy Outlook, 2023, Announced Pledges Scenario

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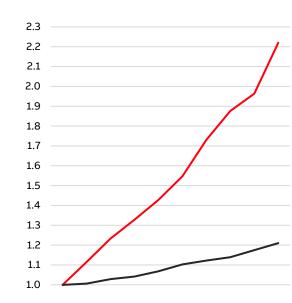
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More efficient and flexible manufacturing solutions needed due to shrinking and increasingly expensive labor force

## Automation needed to remain able and efficient Labor force is shrinking and increasingly expensive

Share of working age population Unit labor cost index (LCU, 2010 = 100) in selected countries/regions (15-64) in selected countries/regions +48% 74% 72% 295 70% +23% +19% 68% +8% 66% 64% 199 62% 165 60% 150 58% 138 139 134 56% 116 100 100 100 100 54% 52% 50% 2010 2020 2030 2040 2050 United States China India EU top 4<sup>1</sup> 2030 2010 2022 - China - India - Europe - United States





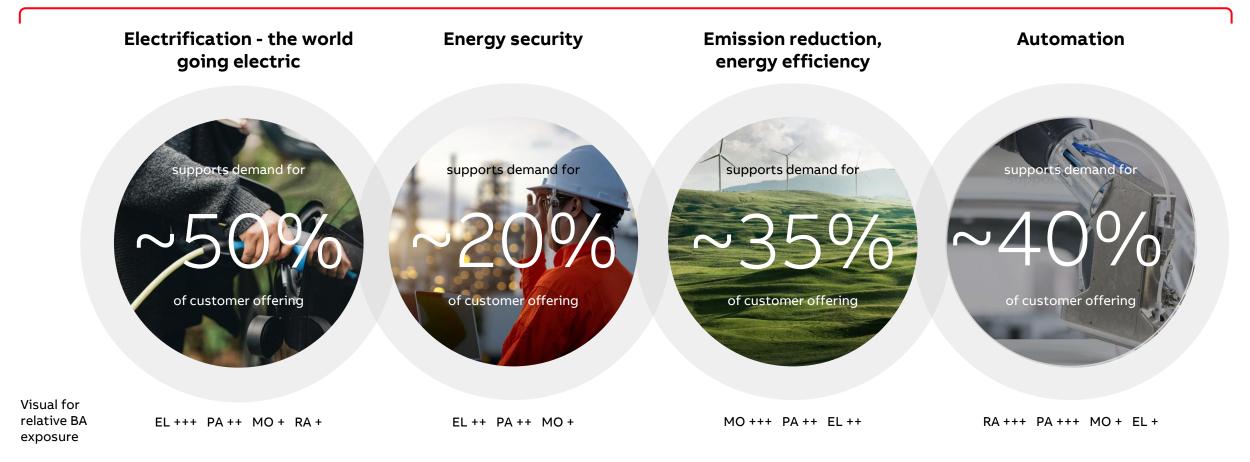
— China

United States

1. EU top 4 = Germany, France, Italy, Spain Source: UN Population Prospects 2022, S&P Global

## ABB purpose aligned with secular trends

## Businesses exposed to several secular trends



## **Future proof**

ABB purpose and customer offering aligned with secular trends

#### More electricity

Electricity demand growing >10x faster than other energy sources in 2022-2030, resulting in ~50% higher average annual investment into electricity networks in 2023 – 2030 (vs 2016 – 2022)<sup>1</sup>

#### Higher energy-efficiency

**~45%** of the world's electricity is converted into motion by electric motors yet only **~23%** of the world's electric motors are optimized through the control of drives

#### New energy sources

Share of low-carbon sources in global energy mix to increase +50% – points from ~20% today to ~70% in 2050<sup>1</sup>

#### Shrinking labor force

Global number of working age people (15 to 64 years) per retiree (65 years or over) to fall by ~20% over next 10 years<sup>2</sup>

1. IEA World Energy Outlook 2023, Announced Pledges Scenario 2. United Nations World Population Prospects 2022

## ABB Our purpose

We enable a more sustainable and resource-efficient future with our technology leadership in electrification and automation

# **Our offering** supports customers to:

Reduce waste and increase circularity

Reduce carbon intensity

Increase labor productivity

Increase energy efficiency

Increase flexibility

**Reduce footprint** 

Reduce downtime

Increase safety and improve working environment

## Improving performance

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Financial targets

Rising

ROCE

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balance sheet

margin levels ſ

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Strong cash flow

**Cementing higher** 

**Sustainability** targets 'হ্যা

**Progress towards** sustainability 'হ্য targets





## Financial target framework

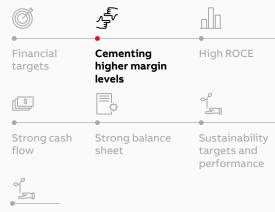


Progress towards sustainability targets

1. Calculated to exclude FX impacts and transformational acquisition and divestments, includes bolt-on acquisitions and divestments within divisions

Carl Carlo	T SARA SA		
UPGRADE	UPGRADE	UPGRADE	
<b>Growth</b> through economic cycle	<b>Op. EBITA %</b> annual	ROCE annual	
Comparable	16%-19%	>18%	
5%-7% <sup>average</sup>		Excl. transformational acquisitions of full Division or deals larger than 3% of Group revenues	Dividend policy
Excluding FX impacts, acquisitions and divestments			unchanged at rising sustainable
	UPGRADE	UNCHANGED	dividend per share
Acquired	<b>EPS growth</b> through	FCF conversion to	over time
<b>1%-2%</b> <sup>average<sup>1</sup></sup>	economic cycle	<b>net income</b> annual	
Target is the net of acquisitions and divestments	At least high single-digit %	~100%	
	Basic EPS		





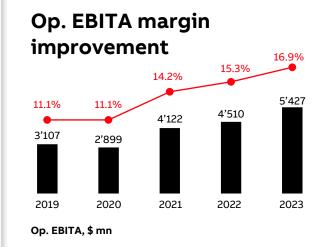
Progress towards sustainability targets

# Continuous improvements of Operational EBITA margin within target range

#### Gross margin improvement

- 1 Full **accountability** of the P&L at the division level facilitates higher **speed** in decision making including for further manufacturing excellence
- 2 Investing in systems and tools for further transparency and analysis of variable cost items
- 3 Changed construct of productivity KPI to gross profit/FTE (from revenues)

Target: 3-5% p.a.

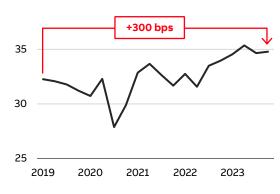




Target less than 100bps variance between Op. EBITA and EBITA margin as from 2025

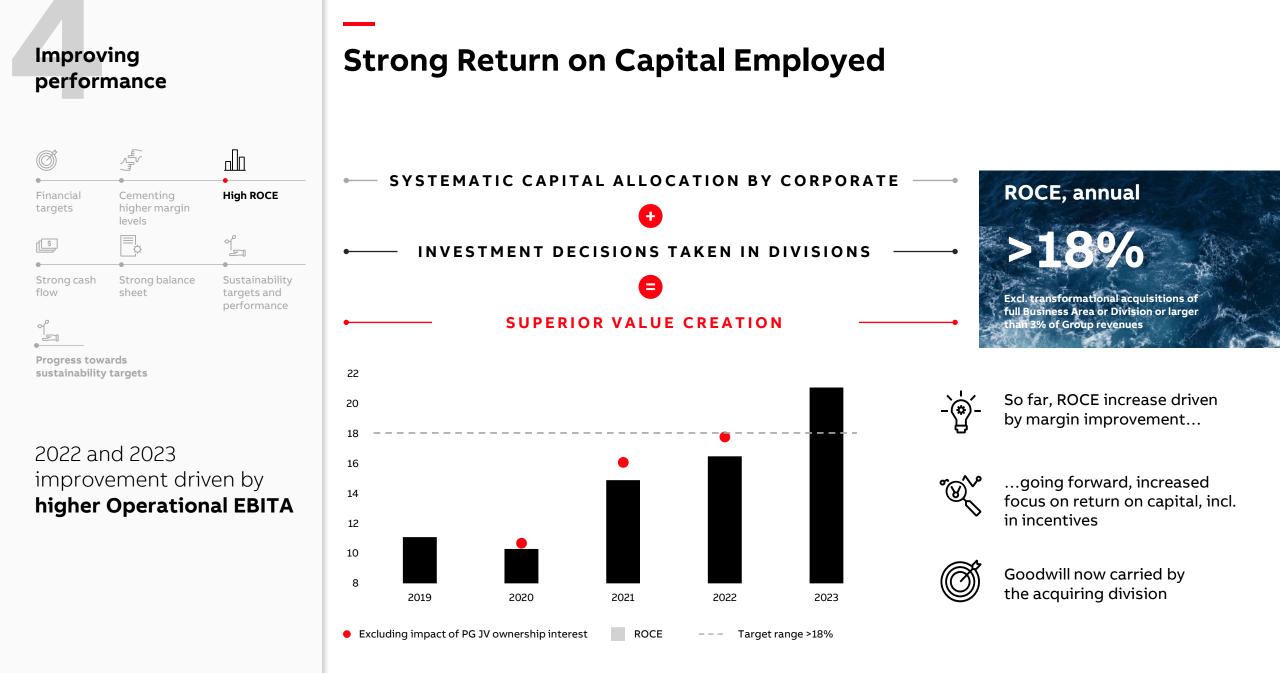
Variance between Op. EBITA and EBIT
2018-2022
2023 -2024
2023 -2024
Onwards
Conwards

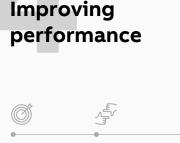
#### Revenues, gross margin



Targeting... Op. EBITA margin (annual) 16%-19%

EPS growth At least high single digit growth through cycle





#### **High ROCE** Financial Cementing targets higher margin levels رگ ٩ \_\_\_ Strong cash Strong balance Sustainability flow sheet targets and performance

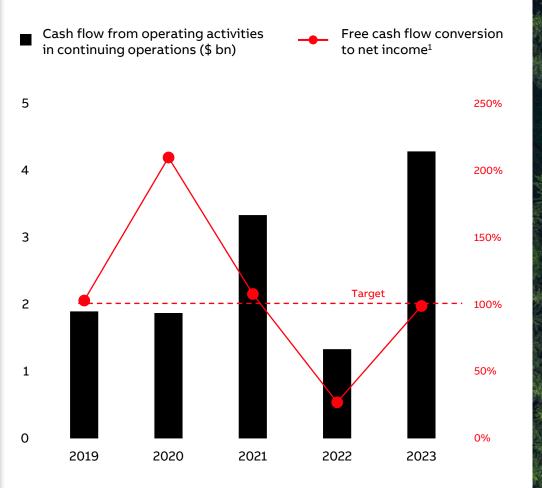
Progress towards sustainability targets

#### Cash flow improvement

due to better operational performance, working down net working capital and less adverse items impacting comparability

1. Amount represents total for both continuing and discontinued operations

## Focus on cash flow



#### **Cash drivers**

- Improved profitability from businesses with profitability mandate
- Profitable growth from
   businesses with growth mandate
- Strong focus on cash conversion and net working capital
- Fewer non-recurring items

Steady capex profile

~100% FCF conversion to net income



## Strong balance sheet

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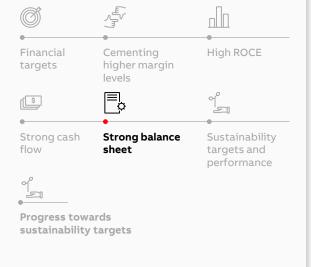
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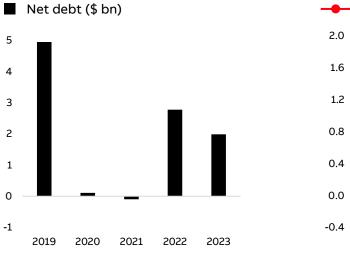
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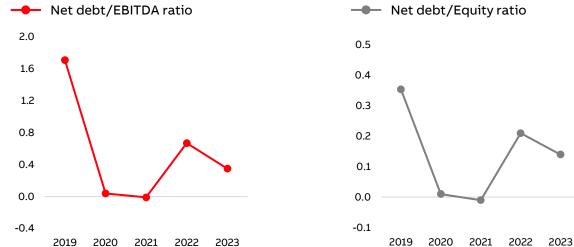


#### Strong balance sheet on

the back of improved operational performance and active portfolio management

Headroom for acquisitions





Long-term target credit rating of at least strong investment grade Gurrent rating of A/A2

## Improving performance



Progress towards sustainability targets

## Enabling a net zero world while achieving

higher growth and higher returns through the economic cycle

## **Reinforced and accelerated sustainability agenda** Aligned with recognized international frameworks

#### Upgraded in 2023



CO2

• Scopes 1, 2 & 3

• 2030 & 2050

600Mt avoided CO<sub>2</sub>e emissions ambition

> • Aligned with WBCSD 2023 guidance

• By 2030

## We enable a **low-carbon society**

- Reduce emissions in own operations by 80% and achieve carbon neutrality (with offsets)
  - Support our customers in **reducing annual CO<sub>2</sub>** emissions by >100 Mt<sup>1</sup>
- 50% reduction in emissions of tier-one suppliers (70% of procurement spending)

## We preserve **resources**

- 80% of ABB products & solutions covered by circularity approach
- Zero waste to landfill from own operations wherever possible

## We promote social progress

- Zero harm to our people and contractors
- 25% women in senior management roles
- Top-tier employee engagement score in our industry
- Impactful support for community-building initiatives

#### **ABB Way**

Sustainability embedded throughout the business

Board of Directors | Executive Committee Sustainability Council | Division-level implementation



## **Reinforced and accelerated sustainability agenda** Aligned with recognized international frameworks



1. (5 Strict: Absolute emissions increase considering energy input. Strict scenario resulted in a 11.3% absolute increase versus the 2030 target of a 25% reduction. (Representative: Absolute emissions decrease considering energy losses. Representative scenario resulted in a 0.2% absolute decrease versus the 2030 target of 25% reduction.

2. Portfolio assessed through Circularity Approach

# Rewarding shareholders



## Rewarding shareholders

#### Strong balance sheet

allows for solid cash distribution as well as organic and acquired growth

Profile of **steady annual increase** in dividend

Expect to **continue to utilize share buybacks** as a mean to return excess cash to shareholders

## **Dividends and share buybacks**



Committed to a rising sustainable dividend per share over time

Excess cash returned to shareholders through share buybacks Ongoing buyback program of up to \$1 billion

- **1.** Market leader with world class technology
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We enable a more sustainable ar resource-efficient future with our technology leadership in electrification and automation



### Important notices

This presentation includes forward-looking information and statements including statements concerning the outlook for our businesses.

These statements are based on current expectations, estimates and projections about the factors that may affect our future performance, including global economic conditions, and the economic conditions of the regions and industries that are major markets for ABB Ltd.

These expectations, estimates and projections are generally identifiable by statements containing words such as "expects," "believes," "estimates," "targets," "plans," "outlook," "on track," "framework" or similar expressions. There are numerous risks and uncertainties, many of which are beyond our control, that could cause our actual results to differ materially from the forward-looking information and statements made in this presentation and which could affect our ability to achieve any or all of our stated targets.

## The important factors that could cause such differences include, among others:

- Business risks associated with the volatile global economic environment and political conditions
- Costs associated with compliance activities
- Market acceptance of new products and services
- Changes in governmental regulations and currency exchange rates, and
- Such other factors as may be discussed from time to time in ABB Ltd's filings with the US Securities and Exchange Commission, including its Annual Reports on Form 20-F.

Although ABB Ltd believes that its expectations reflected in any such forward-looking statement are based upon reasonable assumptions, **it can give no assurance that those expectations will be achieved.** 

This presentation contains non-GAAP measures of performance. Definitions of these measures and reconciliations between these measures and their US GAAP counterparts can be found on our website – link below.



